

What is Claimed:

- 1 1. A method of fabricating a semiconductor chip including a top
2 passivation layer formed over the chip comprising the step of:
3 forming at least two alignment marks in or on the passivation layer.
- 1 2. The method according to claim 1 further comprising the step of
2 selectively processing a portion of the chip using the marks to locate said portion, the
3 processing selected from etching and adding material.
- 1 3. The method according to claim 1 wherein the alignment marks
2 comprise a metal formed on a top surface of the passivation layer.
- 1 4. The method according to claim 1 wherein the chip includes an
2 additional underlying passivation layer, and the alignment marks are formed by
3 depositing material over the underlying passivation layer, and then covering with the top
4 passivation layer.
- 1 5. The method according to claim 1 wherein the alignment marks
2 comprise etched areas formed in the top surface of the top passivation layer.
- 1 6. The method according to claim 1 wherein the marks are in the shape of
2 crosses.
- 1 7. The method according to claim 6 wherein the marks include rectangular
2 portions at one or more ends of the crosses, the number of portions depending upon the
3 quadrant of the chip in which the mark is positioned.
- 1 8. The method according to claim 1 wherein there are at least four
2 alignment marks, one at each corner of the chip.
- 1 9. A semiconductor chip comprising:
2 a passivation layer as a top layer; and
3 at least two alignment marks formed in or on the passivation layer to
4 provide topological features for locating selected areas of the chip.
- 1 10. The chip according to claim 9 wherein the alignment marks comprise a
2 metal formed on a top surface of the passivation layer.
- 1 11. The chip according to claim 9 wherein the chip includes an additional
2 underlying passivation layer, and the alignment marks are formed by material formed
3 over the underlying passivation layer and covered by the top passivation layer.

1 12. The chip according to claim 9 wherein the alignment marks comprise
2 etched areas formed in the top surface of the top passivation layer.

1 13. The chip according to claim 9 wherein the marks are in the shape of
2 crosses.

1 14. The chip according to claim 13 wherein the marks include rectangular
2 portions at one or more ends of the crosses, the number of portions depending upon the
3 quadrant of the chip in which the mark is positioned.

1 15. The chip according to claim 9 wherein there are at least four alignment
2 marks, one at each corner of the chip.